

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: May 21, 1997  
Date Received: May 15, 1997  
Project: Metro Self Monitor, PO #M57215  
Date Samples Extracted: May 15, 1997  
Date Extracts Analyzed: May 16, 1997

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR CHROMIUM, COPPER, NICKEL, AND ZINC  
USING METHOD 6010**

**Samples Processed Using Method 3005A**  
Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M57215	0.33	0.34	0.42	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

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Date of Report: May 21, 1997

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**QUALITY ASSURANCE RESULTS FOR  
THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 78022 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.29	0.29	0	0-20
Copper	mg/L (ppm)	0.24	0.23	4 a	0-20
Nickel	mg/L (ppm)	0.29	0.27	7	0-20
Zinc	mg/L (ppm)	<0.05	<0.05	nm	0-20

Laboratory Code: 78022 (Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result	% Recovery MS	MSD	Acceptance Criteria	Relative Percent Difference
Chromium	mg/L (ppm)	5	0.29	88	94	80-120	7
Copper	mg/L (ppm)	5	0.24	85	89	80-120	5
Nickel	mg/L (ppm)	10	0.29	87	94	80-120	8
Zinc	mg/L (ppm)	5	<0.05	89	97	80-120	9

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery MS	MSD	Acceptance Criteria	Relative Percent Difference
Chromium	mg/L (ppm)	5	99	100	80-120	1
Copper	mg/L (ppm)	5	96	96	80-120	0
Nickel	mg/L (ppm)	10	101	100	80-120	1
Zinc	mg/L (ppm)	5	101	101	80-120	0

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.

KJ AI  
5/15/97 11:15

Company Name: Alaskan Copper Works Contact: Gerald A. Thompson  
Address: 5. Henderson  
City: Seattle wa Zip: 98134  
Phone: (206) 382-8377 Date: 5-15-97

[illegible]

SIGNATURE	PRINT NAME	COMPANY	Date	Time
John [Signature]	Bernard Thompson	ACW	5/15/97	10:26 AM
Received by: [Signature]	Siri Nelson	FBI	5/15/97	10:27 AM
Received by:				
Received by:				

02/19/54

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D.  
Beth Albertson, M.S.  
Charlene Jensen, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.  
Melanie Kirol, B.S.  
May 21, 1997

3012 16th Avenue West  
Seattle, WA 98119-2029  
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e-mail: fbi@isomedia.com

**INVOICE # 97ACU0521-2  
DUPLICATE COPY**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M57215: Results of testing requested by  
Gerry Thompson, Project Manager for material submitted on May 15, 1997.

1 water sample analyzed for  
Chromium, Copper, Nickel, and Zinc  
using Method 6010 @ \$65 per sample

\$ 65.00

Amount Due .....

**\$ 65.00**

FEDERAL TAX ID # (b) (6)



**FRIEDMAN & BRUYA, INC.**

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FAX: (206) 283-5044  
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May 21, 1997

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on May 15, 1997  
from your Metro Self Monitor, PO #M57215 project.

We appreciate this opportunity to be of service to you and hope you will call if you  
should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kurt Johnson  
Chemist

keh  
Enclosures  
ACU0521R.DOC